IN THE SUPREME COURT OF THE UNITED STATES.

No. 17, October Term 1901.

THE CARNEGIE STEEL COMPANY, LIMITED,
COMPLAINANT, PETITIONER,

vs.

THE CAMBRIA IRON COMPANY,
DEFENDANT.

On Writ of Certiorari to the United States Circuit Court of Appeals for the Third Circuit.

REPLY TO THE SUPPLEMENTAL BRIEF FOR THE DEFENDANT ON REHEARING.

As the order for reargument did not require the filing of additional briefs and as the case of appellant had been carefully stated in the briefs filed at the former hearing, it was not the intention of the counsel for the appellant to file an additional brief; but on Saturday, October 12, 1901, appellee's counsel served on appellant's counsel an additional brief, which, while being mainly a reiteration of former arguments, contained so many positive assertions of an erroneous character that it was thought better to prepare and file a short brief traversing the main propositions thus advanced by the appellee, in order that any presumption that the appellant assented thereto might be repelled and the answer to them might be briefly restated.

The errors of the propositions advanced by the appellee, we believe, are capable of easy demonstration.

First: The patent is not broadly for "mixing." The claim in issue negatives such an idea. It claims only a particular method of mixing.

The main premise of defendant's argument is that the Jones patent describes simply the mingling of units of metal into batches of standard composition, and that the peculiar method of mixing which the parties to this suit employ, and in which successive portions are added to and withdrawn from a constantly maintained body or pool which is never drained or emptied, and which serves to equalize the metal and render the fluctuations of the withdrawn charges gradual, is neither described nor claimed. In other words, defendant argues that Jones failed to describe the process which he invented and used. To this we answer:

(A.) The thing which Jones actually invented was the use of the dominant pool of metal (as Judge Buffington aptly denominates it) in the process of mixing. It is this which gives to his process its great commercial value and distinguishes it from all prior practices. We start therefore with the rule of law that, if this is the true invention, the patent should be construed so as to give to the inventor the benefit of it, if such construction is fairly warranted by the language which he has employed.

Klein vs. *Russell*, 19 Wall., 433, 466.

McClain vs. *Ortmayer*, 141 U. S., 419, 425.

It is only by disregarding this rule, refusing to understand the process as the skilled steel-maker sees it, and construing the patent with narrow and destructive criticism, that the reasoning of defendant's brief can be accepted. It imposes upon the patent a meaning which the inventor

certainly never contemplated and which is as unscientific as it is unwarranted by the specification.

Even if it were true that the patentee has failed to recite in detail the advantages of his invention, he should not be deprived of the benefit of the rule of law above mentioned, if it appears that those advantages are recognized by those skilled in the art, and that they result necessarily from the practice of the process which he has described.

Roberts vs. *Ryer*, 91 U. S. 150–157.

Dixon Woods Co. vs. *Prifer*, 55 F. R., 390.

(B.) The specification does describe the invention as it is practiced. It states in no uncertain terms that a pool of metal is to be maintained, and indicates the results which follow its use. On page 871 of the Record it is said: "The primary object of my invention is to provide means for rendering the *product* [*steel ingots*] of steel works uniform in chemical composition."

On page 873 it is said (lines 5-12):

> "The purpose of which is that when the metal is poured out of the spout *a considerable quantity may always be left remaining and unpoured*, and that whenever the vessel is replenished *there may already be contained in it a body of molten metal* with which the fresh addition may mix. I thus secure, as much as possible, uniformity in character of the metal which is fed to and discharged from the tank, and *cause the fluctuations in quality of the successive tappings to be very gradual*."

Jones does not here pretend to secure from the mixer metal of absolute uniformity as defendant's brief implies. The language is "as much as possible uniformity in character," and "cause the fluctuations in quality of the successive tappings to be very gradual."

On page 874, line 2, with reference to the size of the retained pool it is said, that the vessel "is adapted to receive

and hold a large quantity of molten metal without its surface rising high enough to enter the discharge spout." The word "*large*" here used negatives the whole of defendant's argument on this subject.

On page 874, paragraph 2, line 6, the equalizing influence of the successive additions upon the temperature of the metal is stated: "The heat being kept up by repeated fresh charges of molten metal."

On page 874, paragraph 3, line 7, it is said:

> "The tilting of the vessel does not, however, drain off all the contents thereof, a portion being prevented from escaping by reason of the elevated position of the spout 6, and as the vessel is replenished from time to time each new charge mixes with parts of previous charges remaining in the vessel, by which means *any sudden variations in the quality of the metal supplied to the converter is avoided.*"

(C.) The second claim of the patent is capable of no other interpretation than that a constant body of metal, defined in the specification as "large" in quantity (page 874, line 2) and "a considerable quantity" (page 873, line 6) is essential to the process. Follow the steps of the claim, and a dominant pool of metal will necessarily result. Indeed it is hard to see how the patentee could have chosen more apt words to define the requisites of his invention.

The second claim is (Rec., p. 875):

> "In the art of mixing molten metal to secure uniformity of the same in its constituent parts preparatory to further treatment, the process of introducing into a mixing receptacle successive portions of molten metal ununiform in their non-metallic constituents (sulphur, silicon, etc.), removing **portions only** of the composite molten contents of the receptacle **without entirely draining or emptying** the same and **successively replenishing** the receptacle with fresh ununiform additions, substantially as and for the purposes described."

(D.) The definition of the Jones invention stated in defendant's brief is in conflict with the meaning which the patent conveys to the skilled steel-worker. Defendant's witness, F. W. Wood, the President of the Maryland Steel Company, testified (Rec., p. 166, last para.):

> "I understand an essential element of the Jones patent, simply as a practical steel manufacturer, to be the maintenance of an approximately constant body of metal in the receiving or mixing vessel which is not allowed to fall below a certain minimum."

Nothing could show more clearly than this testimony the narrow and astute nature of the definition which for its own purposes of attack the defendant now seeks to impose upon the patent.

(E.) The argument that in the proceedings in the Patent Office the invention was changed from a method of reservoiring to a method of mixing is a mere play upon words. The second claim of the patent is substantially the same as the single claim originally presented except that it is limited and rendered more precise by the insertion of the words, "preparatory to further treatment." The original claim (Rec., p. 725) used the word "storing" in the sense of introducing the metal into the receptacle, and not in any sense of reservoiring. It is upon this slender verbal change, the substitution of the word "introducing" for "storing," that the defendant has built up its argument that the invention was changed in the Patent Office, and this in face of the fact that the original claim does not state that the purpose is *reservoiring*, but, to quote the language of the claim, that "the character of the metal so treated is *equalized*." The file wrapper also throws light upon what was meant by the added words "preparatory to further treatment," and shows that the "treatment" intended in

the claim was refining (Appellant's brief, p. 126, last paragraph).

If we are right in our contention that the Jones patent describes, and in apt words claims, what in fact was his real invention, it follows that all the other points of defendant's supplemental brief must fall with the mistaken premise upon which they are based. A brief review will show this to be the case.

Second: The Prior State of the Art.

Passing for the present the valid argument that Jones was the first to accomplish a result which skilled metallurgists had been seeking for many years, that the greatest notoriety had been given to the needs of the art by the published discussions of technical societies and the reports of skilled investigators, and that therefore it is probable that the Jones invention is not to be found in the prior practices which are now said to disclose it, but which did not disclose it during the time when the solution of the problem was being sought; we will review briefly the prior processes, and will state some of the reasons why they did not anticipate the invention.

The Deighton Patent.

There is nothing in Deighton's specification to which the second claim of the patent in suit can apply. He says nothing about partial emptying of the receptacle, nor the retaining of a residue. As to this, a main feature of the Jones invention, his description is silent. The burden is not upon us to show that the invention is not described. It is upon the defendant to show that it is described in terms or by necessary implication in these prior publications.

Coffin vs *Ogden*, 18 Wall., 120;
Cantrell vs. *Wallick*, 117 U. S., 689.

Deighton's idea was to set in front of a group of blast furnaces a vessel into which the metal tapped therefrom would run and mix; and not only does it not appear that a constant pool of metal was to be retained, but it does affirmatively appear in the proofs that Deighton's apparatus could only have been used by substantially draining it after the mixing of each batch. (Gayley, Rec., pp. 542-543, q. 175-181; p. 579, q. 344-346; p. 582, q. 353; Kennedy, p. 448-450, q. 5).

The fill and empty mode of mixing was frequently tried, but it failed to overcome the difficulties of the direct process. James Gayley says (p. 27):

> "It is not possible to operate these mixers by filling them with metal from two or three furnaces, draining that out, and refilling them again in the same way. We have had experience on this point when through circumstances the supply of metal was limited, and we found that the variation in composition was very marked indeed. Consequently, we have established the hard and fast rule that the mixers must be continually kept full."

And on page 546 he says:

> "It is impossible to fill a vessel up and to withdraw successive charges without the last charges varying so much in sensible heat from the first charges as to act in the converter like two different metals. We experience this result in our own mixer every Saturday when we drain it, for the last charges withdrawn are generally so cold that they need to be side-blown."

The Snelus Method.

The method of Snelus also involved the alternate charging and emptying of a mixing vessel. No one until Jones ever got beyond that plan, or discovered that a pool of iron

could be maintained in liquid condition for an indefinitely long time simply by adding to it from time to time successive portions of molten iron, or that the difficulties of the direct process could be overcome by the use of such pool.

Holley described Snelus' method as follows (p. 837):

> "In order to get a more uniform metal, Mr. Snelus is about trying the experiment of placing a 20-ton ladle on a hydraulic lift at the "A" pit, so arranged as to store, mix, and pour, say, three 6-ton to 7-ton blast-furnace taps, or to mix blast furnace and cupola metal. No doubt this body of metal will "live" if the ladle is thickly lined and well covered."

This was obviously a method of filling and emptying, and was the same in principle as the plan of Bessemer, who said (p. 782):

> "It was proposed to make at least three 7-ton tappings into that (20-ton) vessel and to move it on wheels into the converting house, using a pair of converting vessels, one after the other, until the four charges of five tons each were worked off."

These fill and empty processes were well known, and yet we learn from Sir Lowthian Bell and David Evans, managers of the English Works at which they were used, that the difficulties of the direct process were not overcome until the introduction and use of the Jones mixer. (Appellant's brief, pp. 61-64.)

If Deighton did not intend the fill and empty process, then (1873) the only one ever suggested, why did he not say so? If he meant a new process why did he not describe it? An anticipation is not something dug up after the patent, but something made apparent before the patent.

Holley's Publication.

It must not be forgotten in reading Holley's paper that he has stated in exact terms the two methods of mixing which had then been devised and which he hoped would be successful in remedying the evils due to the suddenly varying content of silicon in the direct metal, and that neither of these plans resembled the method of the Jones patent. He says (p. 833):

> "The obvious remedy is to mix a number of blast furnaces charges * * * Two systems of doing this are on the eve of trial; the one is simply mixing so few charges in a tank that the metal will be drawn out before it chills; the other is to store a larger number of charges in a heated tank—that is to say, in an immense open hearth furnace."

The first of these two plans is the fill and empty plan of Snelus, which we have discussed above, and is obviously not the method of Jones. The second is the plan of Durfee, which at the time of Holley's paper was on the eve of trial at Moss Bay (Rec., p. 841, last para., p. 842). Holley says, p. 842, "I am promised an early account of the results of this experiment." The result of the experiment was given subsequently by Mr. Snelus, was said in 1878, the year after the date of Holley's report (Rec., p. 789):

> "The Moss Bay Company attempted to modify the thing some time ago, and put up a heating furnace, but that, to his mind, was a step in the wrong direction. Anyhow, the thing had failed, and no one in England, as far as he knew, was using any intermediate receiver between the blast furnace and the converters."

The reason why this open hearth mixing furnace was not the process of Jones is stated at length in appellant's brief (bottom p. 47–p. 51, bottom p. 68). Like Snelus' plan, it

was a process of fill and empty, and Mr. Metcalf shows from his own experience that it would be impossible to work it otherwise. If used as a continuous operation, the changes produced in the iron by the reverberatory furnace would clog the furnace and defeat the process. (Metcalf's testimony, appellant's brief, end of p. 50 to p. 51.) Holley himself shows that he had in mind nothing more than a method of filling and emptying, for his purpose in using a furnace as the receptacle of his larger number of charges of metal was to enable him to keep it hot, as he says, "for a long time", *i. e.*, long enough to enable the mixture to be drawn off and used in the converters before it could chill.

It must be remembered also that notwithstanding Holley's expressions of hope, he never reached any solution of the difficulties of the direct process. We are assured of this by Mr. Maynard in his remarks made to the Iron and Steel Institute in 1878 (Rec., p. 789, line 6), and by Mr. Carnegie, by whom Holley was employed in these very investigations. (Carnegie, p. 430, q. 12–13.)

The Whitney Process.

The Whitney process embodied in practice the description of Kirk and the other foundry methods upon which the defendant relies, and in discussing it we discuss them all. It had no resemblance in spirit or in substance to the process of Jones. It never did suggest the Jones method, and it never would have suggested it if the exigencies of this patent suit had not stimulated the zeal of experts to find analogies of form and to argue from them analogies of substance.

Jones' purpose was to create and maintain a large body of metal in his mixer as a means of equalizing the converter charges and rendering their fluctuations very gradual. Whitney's purpose was to collect in his ladle a molten body of care-

fully selected and premixed metal, sufficient in quantity to enable him to cast it rapidly into the molds in the short period of time devoted in the afternoon to the work of casting. He then got rid of it as quickly as possible. Whitney recognized that the layers of iron from the cupolas when melted and run together into the ladle would mix, but with this running together of the molten layers the mixing operation ended. The maintaining of a regulating pool—an essential of Jones' invention—had nothing to do with Whitney's purpose. He was only interested in running the molten ingredients of the charges together, and in keeping enough metal in the ladle to enable the foundry men to fill rapidly and without interruption the hand ladles which were needed for the molds.

Whitney's ladle was set in front of the cupolas as a tub is set before a pump, and mainly for the same purpose. His practice was to tap his three cupolas simultaneously, and at each tapping 6,000 pounds, a large part of the entire capacity of the ladle, was discharged into it at once. (Appellant's brief, p. 83; Stipulation as to size of Whitney ladle, Rec., p. 671.) Obviously if there had been any purpose of maintaining a pool of metal, and of using it as Jones used it, the tappings of the cupola would have been successive and not simultaneous. If Whitney's practice would have suggested anything to the steel-maker it would only have suggested a like practice—the simultaneous running together and mixing of the tappings from a number of blast furnaces, and this practice would never have resulted in the invention of Jones. This is made clear in the testimony of Mr. Kennedy, Rec., p. 454, qs. 12–14, to which we refer.

The resemblance between Whitney's process and Jones' is superficial. They are alike only in that both mix molten metal, but Jones' invention does not consist in simple mixing. The essential feature of his process as defined in his

second claim had nothing to do with Whitney's plans or purposes.

As a matter of history, the Whitney process, although it has been in common use in the foundries of this country ever since 1853 (Rec., p. 119, q. 20, p. 121, q. 36), never suggested Jones' invention to any one. It belonged to a different art, and it has been shown by complainant's witnesses, Metcalf, Kennedy, Gayley, Fry and Sherrerd, that it is inherently different from the process of Jones.

The language of this Court in the recent case of *Beach* vs. *Hobbs*, 180 U. S., 383–392, is believed to be pertinent to this defense. In that case it was said:

> "It appears from the testimony that several of these addressing-machines, of which that of Dennis and York is a type, and which are now claimed to have inspired the Beach patent, had been upon the market for many years, and yet it never seems to have occurred to any one engaged in the manufacture of paper boxes that they could be made available for the purpose of attaching strips to the corners of such boxes. This very fact is evidence that the man who discovered the possibility of their adaptation to this new use was gifted with the prescience of an inventor. While none of the elements of the Beach patent—taken separately or perhaps even in a somewhat similar combination—was new, their adaptation to this new use and the minor changes required for that purpose resulted in the establishment of practically a new industry, and was a decided step in advance of any that had heretofore been made."

THE BESSEMER CUPOLA ACCUMULATING LADLE.

The persistent reiteration in defendant's brief that the Jones process was anticipated by the accumulating ladle used in Bessemer steel works prior to the Jones invention is entirely without warant.

The accumulating ladle was invented by Holley. It was set on scales in front of a set of cupolas for the purpose of accumulating enough metal for a converter charge and enabling it to be weighed. It was often made of somewhat greater capacity than one converter charge, so as to be amply large even when sculled, and to be able to receive an excess of metal when the cupolas happened to be running somewhat faster than the converters. Whether a residuum of metal was left in the ladle or not was a pure accident. It had no mixing function whatever; and Mr. Hunt, defendant's expert, says concerning it (p. 291):

> "There was no absolute rule. Whether or not metal was left after pouring the charge depended upon the relative speed which the cupolas were melting and the metal being converted in the converters. If the blowing was close up to the melting the metal would be poured as soon as sufficient amount for a heat was accumulated." (Apellant's Brief, p. 89.)

Defendant's Method is a Method of Mixing, not of Reservoiring.

The argument that defendant's method is used for the purpose of storing the metal with only incidental mixing is easily shown to be erroneous.

Holley said, concerning the direct process, page 835: "The irregularity of silicon, as before stated, is the only difficulty." Sir Lowthian Bell says that the use of the Jones mixing process has reduced the defective rails one-half.

Now it is perfectly obvious that no method of storing would cure the irregularity of silicon or reduce the number of defective rails. But there is clearer proof even than this that defendant's process is not a process of storing and reservoiring for the purpose of equalizing the supply and demand. Reservoirs are used to provide against any unusual stoppage of the supply or increase of the demand, and whenever such event

occurs, it is met by using up the contents of the reservoir as long as they last, even to the extent of draining them to the bottom. That is the way in which every reservoir is used. Defendant does nothing of this sort. A chalk mark and gauge are provided on the defendant's mixer, and the workmen have orders not to allow the metal therein to fall below 175 tons. A pool of more than one-half the capacity of the mixer must always be maintained, and if the supply of metal should slacken, the converters are stopped rather than lessen the volume of the pool. (Testimony cited on pages 37–39, appellant's brief.) A like practice is followed at complainant's works, where, for the same purpose as the chalk mark, the mixer is provided with a stop which prevents it from being tipped forward beyond a certain point. (Appellant's brief, p. 77, paragraphs 1 and 2.) This is not reservoiring. It is the very opposite. Its purpose can only be to effect the method of Jones, the characteristic novelty of which could not be exemplified more strikingly than it is by this practice of the defendant in stopping the work of the entire mill rather than allow the benefits of the constant pool to be sacrificed or impaired.

Another proof of the same fact is to be found in the manner in which defendant uses its cupola metal which constitutes one-third of the supply for the converters, but which is not passed through the mixer. (See para. 2, p. 76, appellant's brief.)

Cupola metal needs reservoiring as much as blast-furnace metal, and if reservoiring were the purpose of the defendant's mixer it would receive the metal from the cupola ladles as well as from the blast-furnace ladles. On the other hand, if mixing were not the function of the defendant's mixer the blast-furnace metal would be treated like the cupola metal, and would be held in the ladles until the converters needed it. Cast iron will keep molten

in these large 15-ton ladles for several hours. (Holley, p. 798, lines 7–9; Richards, p. 777, para. 1.)

Mr. James Gayley, in his answer to questions 188–190, pages 546–548, states certain facts which show the entire fallacy of defendant's argument that their mixer is used as a reservoir, and as his testimony is concise we ask that it be read as part of this brief.

The lack of obviousness of the Jones method is strikingly shown by the course of the appellee in regard to the use of direct metal.

The appellant in 1882 abandoned the cupola process and began the use of direct metal. It continued this practice for six years, but such was the want of uniformity in metal from the blast furnaces that the disadvantages equaled the advantages gained from the elimination of the cupola. During the earlier part of this period the appellee determined to make a like change and went so far that in 1885 it installed, at great expense, the ladle tracks, drying hoods and other appliances incident to the direct process, but learning of the difficulties experienced by the appellant, abandoned its intention, and, letting the new plant stand idle, continued to use the cupola process.

In 1888, the appellant adopted the Jones process and appellee waited to see how it would turn out. As it proved to be a success, Mr. Morgan visited the Carnegie works, inspected the mixer in operation there, and obtained Mr. Gayley's opinion as to the most desirable size and location for such apparatus. Then he went away and built appellee's mixer in exact accordance with Gayley's recommendations. (Morgan, pp. 391–392; Gayley, p. 553, q. 211; pp. 554–555, q. 219–222). This was in 1895, ten years after defendant had erected its direct metal appliances and seven years after appellant began to use the Jones process. If the mixer was an obvious thing, or was well known in the prior art, why

did not the appellee erect one in 1885, and thus utilize its direct metal plant and escape the expense of its cupolas? Was it not because it was not obvious, and because neither Mr. Morgan or any other of appellee's skilled metallurgists or engineers ever thought or knew of such a thing or its possibilities?

And why, after the appellant, in 1888, put the mixer into successful operation, did the appellee wait until 1895 before resorting to it? Appellee's witness, Forsyth, tells us. He says (Rec., p. 279, Q. 73), "the manufacturers were waiting to see how the process would result and what difficulties arose in operating the mixer."

In appellee's brief it is contended that this delay was due to the fact that the furnace capacity was not sufficient until 1895 to supply a complete plant, but this is inconsistent with the fact that in 1885 the appellee, at a great expense, put in a direct metal plant and would have used it, if they had known how to overcome difficulties which Jones subsequently conquered by the invention of the mixing process.

It seems incredible that if this thing was obvious, that if it could have been had for the simple building, the appellee did not adopt it in 1885, and thus save the loss of the expensive direct metal plant it then installed; and that after Jones had put it into operation in 1888 it should let its direct metal apparatus be idle and wait until 1895 before adding the mixer.

The conduct of the appellee in this respect seems to us to be a conclusive argument against the obviousness of Jones' invention. Its great and undeniable utility is persuasive evidence that it involved patentable invention.

Respectfully submitted,

THOMAS B. REED,
THOMAS W. BAKEWELL,
for Appellant.

THOMAS B. KERR,
of Counsel.

In the Supreme Court of the United States.

No. 17, OCTOBER TERM, 1901.

THE CARNEGIE STEEL COMPANY, LIMITED,
COMPLAINANT, PETITIONER,

VERSUS

THE CAMBRIA IRON COMPANY, DEFENDANT.

Reply to Defendant's Memorandum of Errors.

In the final brief which has been filed by the appellee emphasis is again laid upon the defense that the appellee's mixer is used as a reservoir for storing the metal delivered from the blast furnaces. This we believe to be a mere pretense. A reservoir is a supply of metal placed in reserve, to be drawn upon in time of need. But in appellee's practice the huge pool of 175 tons below the chalk mark is never drawn upon. (Testimony quoted by Judge BUFFINGTON, Rec., pp. 710-712). It is not stored for consumption. Its use, therefore, can only be as a regulating pool, or, in the language of the specification, to render the fluctuations of quality of the successive tappings very gradual.

When it is remembered that the blast-furnace metal is tapped into ladles, each holding a full converter charge, and each of the same size as the cupola ladles; that these blast-furnace ladles are taken one by

one, hoisted, poured into the mixer, and the metal then poured out into the charging ladles, the inquiry will naturally arise : Why treat this blast-furnace metal differently from the cupola metal? Why pour it from one set of ladles into the pool of metal in the mixer and pour it out again into another set of ladles with a loss of heat at each pouring, unless the purpose of the Jones patent is sought to be obtained? Why not keep it in the large ladles into which it is tapped? They are certainly as good reservoirs for blast-furnace metal as for the cupola metal (Gayley, p. 546-548, Qs. 188–190). And in their use of a mixing vessel, for what other purpose than to get the benefit of our invention is it that the appellees maintain the pool of 175 tons, retaining it permanently and refusing to draw upon it, no matter what may be the needs of the converting department?

The constant pool of metal retained in appellee's mixer below the chalk line is the means which it employs to infringe the Jones patent.

The term "dominant pool" does not appear in the Jones patent, and may not adequately express the sense of the invention. It is a term used by Judge BUFFINGTON to express his idea of the function of the body of metal retained in the mixer. The claim requires a *constant residuum*, "substantially as described,"—*i. e.*, such a residuum of metal as will suffice to prevent abrupt variations and to render the fluctuations of quality of the metal withdrawn from the vessel very gradual, as stated in the specification.

Jones, in his patent, makes clear what he regards as the minimum required for this purpose. Any residuum too small to effect the results of the invention is not within the claim, and can be freely used with-

out infringement, but there can be no doubt that the defendant, by the location of its chalk line, has exceeded even the recommendations of the patentee, and has appropriated to the full all that there is of merit in the patented method.

In *Edison Co. vs. U. S. Electric Light Co.*, 52 F. R., 309, 3 C. C. A., 83, on the Edison electric-lamp patent, the Court of Appeals of the Second Circuit said:

"Surely no one could doubt that burners nearly approaching in size the examples of his [Edison's] filament, shown in the patent, would be filaments, nor that burners nearly approaching in size the earlier rod burners would be rods. The defendant's burners are smaller in cross-section than the cotton thread of the patent-office model, and indisputably lie wholly on one side of the dividing line between rods and filaments, which, therefore, for the purposes of this suit, need be no more closely defined."

We do not think it worth while to go again into the correction of the little things with which the defendants' memorandum deals. The defendants are mistaken about them, as we have already fully shown. But we do not choose to have the real case forgotten in small wrangles.

The important facts we have put before the Court with all proper fullness of detail, and we do not believe a great question like this can be decided by anything except the really controlling facts.

We feel confident that the opinion of the Court of Appeals will not satisfy this Court by its reasoning or its conclusions, and that we may well leave our case upon the opinion of the learned Circuit Judge.

THOMAS B. REED
THOMAS W. BAKEWELL
For Appellant.